

XL.—*New Moths in the Joicey Collection.*

By LOUIS B. PROUT, F.E.S.

Family Arctiidæ.

1. *Utetheisa dorsifumata*, sp. n.

♂ ♀.—38–42 mm.

Decidedly larger on an average than *pulohelloides*, Hmps., further differing as follows:—

Head more ochreous (less mixed with white). Abdomen dorsally with strong smoky suffusions.

Fore wing with the black lines macular, but strongly thickened, the spots usually in part confluent; a characteristic longitudinal black white-ringed spot behind the end of M and the base of M¹; red spots more quadrate in form, more completely (though very slenderly) dark-edged; terminal black spots more consistently and uniformly continued across cilia.

Hind wing of ♂ with a black-grey streak (1 or 2 mm. in length) along middle part of the ridge which overhangs the inner-marginal pocket; hair-pencil apparently less developed and whiter; discal mark in both sexes varying in development (strong to obsolescent), perhaps stronger in the ♀ than in the ♂; apical border rather broad; hamate patch with its posterior edge longer than its anterior, produced to a proximal point on or just behind M¹; dark terminal markings between fold and tornus better developed.

Fore wing beneath with the white parts suffused with smoke-colour, except for a clear patch at and sometimes beyond end of cell. Hind wing beneath with the dark markings enlarged.

Angi Lakes, Arfak Mtns., North Dutch New Guinea, 6000 ft., Jan.–Feb. 1914 (A., C., & F. Pratt); 3 ♂ ♂, 3 ♀ ♀.

The increase of black more recalls *salomonis*, Rthschd., and *ruberrima*, Rthschd., but they have both more nearly the ♂ antenna of *pectinata*, Hmps. The group still needs careful revision on extensive material, but the present species is sufficiently outstanding.

Family Hypsidæ.

2. *Nyctemera pellex perversa*, subsp. n.

♂ ♀.—37–41 mm.

On an average smaller than the other races of *peller*, Linn.,

but distinguished at once by having the large roundish or oval discal patch of the fore wing prolonged into a band which *reaches the costal margin* (except for a brown line along the costal margin itself) and also *reaches SM²*, sometimes continuing to the hind margin. This band varies in width and exact shape, but may always be characterized as sinuous-edged proximally, projecting in middle distally, and more or less attenuated posteriorly. Proximal hind-marginal white patch of fore wing reduced or almost wanting, proximal white spot in cell occasionally (as also in other races) minute or obsolete.

Tenimber Islands: Yamdena (*W. J. C. Frost*), type ♂, allotype ♀, and others in coll. Joicey. Also in coll. Tring Museum.

3. *Nyctemera albipuncta zoilides*, subsp. n.

♂.—36 mm.

Head and body as in *a. albipuncta*, Druce (P. Z. S. 1888, p. 573).

Fore wing with the subbasal white patch wanting, that in the middle of the wing much reduced, forming a roundish spot of less than 3 mm. diameter, anteriorly reaching middle of cell, posteriorly just crossing M²; all the submarginal spots reduced, the second and fourth thus becoming mere dots.

Hind wing with the black costal border uniform, reaching SC; distal border broadened, the contained white spots somewhat reduced.

Rook Is., Aug. 1913 (*A. S. Meek*). Type in coll. Joicey.

The mimetic resemblance to the Rook Island form of *Tellervo zoilus*, Cram., is rather striking.

4. *Pericopsis tricolor albisarta*, subsp. n.

♀.—74–80 mm.

Fore wing with the oblique pale transverse band and the half-band beyond it both well-developed and very white, only anteriorly and at extreme edges powdered with dark scales, vein M¹ between them scarcely bordered by any dark irroration.

Hind wing with an additional patch of very pale yellow scales at end of cell, of which *t. tricolor*, Sulz. (Gesch. Ins. t. xxii. fig. 5), shows no trace.

Bolivia: Mapiri (type); Prov. del Sara (paratype).

5. *Phaloë isosoma*, sp. n.

♀.—56 mm.

Head black, spotted with white, conspicuous being a more or less triangular white spot at each corner of face, the upper pair the larger; postorbital rim white. Palpus black, somewhat marked with white near base; third joint elongate. Antenna black, the pectinations about as long as diameter of shaft. Thorax above brown-black, anteriorly dotted with white. Abdomen above and beneath white, with narrow dark segmental rings, an ill-defined, interrupted, narrow median dorsal stripe and a rather less narrow lateral one. Legs longitudinally striped black and white.

Fore wing brown-black, not quite opaquely scaled; veins black; a red line or narrow streak from base in front of C, about 8 mm. in length; an oblique pale band from costa before middle running in direction of tornus, but ending at fold, white at costal end, otherwise pale brownish grey, subtranslucent; a subtranslucent (but whiter) subapical patch from SC⁵ to near R³, narrowing posteriorly.

Hind wing with M¹ stalked with R³, as in *patula*, Walk., *trötschi*, Druce, *veronia*, Druce, etc., but not in the genotype; predominantly white, becoming translucent in end of cell and outwards, from R¹ to behind M² (possibly here rubbed, but quite uniform on the two wings); a small slight dark basal patch; a black distal border of about 5 mm. breadth, slightly broader apically and narrower near tornus, its proximal border slightly crenulate, especially in posterior half; a minute white terminal mark between SC² and R¹, extending on to the fringes.

Fore wing beneath with the red costal streak rather broader and brighter, proximally slightly underlined with white on C; median band white; subapical patch nearly as above; a white streak behind cell, interrupted near base and not reaching base of M²; a white terminal spot between the medians. Hind wing beneath white, with the subtranslucent patch as above; veins somewhat blackened, especially C and SC and the space between them prior to their divergence; black border as above, but with the spot between SC² and R¹ rather larger, an abdominal white terminal spot about M² and a very fine white terminal line between fold and SM².

Chanchamayo, E. Peru.

Near *patula*, Walk. (List Lep. Ins. ii. p. 349), distinguished by the red costal streak, the central band of fore wing

more oblique, shadowy, not yellow, border of the hind wing narrower, anal end of abdomen (from seventh somite) not blackened. Perhaps, as in that species, the colour of the hind wing may vary between yellow and white.

6. *Asota talboti*, nom. nov.

Asota intermedia, Joicey and Noakes, Trans. Ent. Soc. Lond. 1915, p. 197, t. xxi. fig. 3 (nec Rthschd.) (Biak).

My attention has been drawn to the fact that the name of *intermedia* is preoccupied in this genus by *Asota plana intermedia*, Rthschd., Nov. Zool. iv. p. 359 (1897). I have therefore pleasure in renaming it after my friend Mr. Talbot, who I understand worked out its distinctions for the authors.

7. *Cerura ejecta*, sp. n.

♂.—40 mm.

Face black. Head whitish. Antennal pectinations dark brown. Thorax and underside of abdomen ochreous whitish, abdomen above mixed white and black (largely abraded). Legs largely whitish, fore leg and tarsi partly darkened.

Fore wing thinly scaled; dirty white, with pinkish reflections; anteriorly (on C or between C and SC¹) with black dots and dash, the latter occupying approximately the second fifth of C; transverse markings (and in posterior part of wing a little irroration) fuscous; antemedian line obsolescent, best developed in cell; orbicular and reniform stigmata white, very ill-defined, finely and incompletely outlined, the former accompanied proximally by a longitudinal blackish-fuscous mark; median line double, slightly dentate outwards on veins, arising from the distal edge of orbicular and proximal edge of reniform, incurved between M² and SM², darker behind M², reaching hind margin well beyond middle; postmedian rather thicker and stronger, more deeply incurved behind M² (consequently here approaching the median), then oblique outwards to hind margin near tornus; traces of a fine and incomplete duplicating line distally to and parallel with postmedian; subterminal line also nearly parallel with these, but formed of interneural wedges (anteriorly), dash (between R² and R⁴) or dots (posteriorly), the dot between R³ and M¹ and two nearly at tornus being large; termen with interneural wedges pointing inwards.

Hind wing white, at abdominal margin smoky; a smoky mark on termen and fringe between M² and SM².

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Underside similarly but more weakly marked, only the fore wing with large costal spots.

Key Is., Jan.-March, 1916 (*W. J. C. Frost*).

Excepting the large white species of the *australis* group, in which SC^2 of the fore wing arises from the (rather large) areole, this is the first far-eastern species of the genus known to me. Areole small, SC^2 arising from stalk of SC^{3-5} , as in European and N.-American species. The hind wing has a weak connecting-bar between C and SC, but I believe this is here, as elsewhere, inconstant; SC^2-R^1 well-stalked.

Family Geometridæ.

Subfamily *ÆNOCHROMINÆ*.

8. *Eumelea rosalia marginata*, subsp. n.

♂ ♀.—Differs from *rosalia rosalia*, Stoll (Pap. Exot. iv. t. 368 E, Amboina), in having the apex of the fore wing to a width of about 3 mm. clear yellow without rosy irroration and the entire termen more narrowly yellow, though with some irroration or strigulation; apex of hind wing also narrowly clear yellow. The ♀ is more mixed with yellow than any of the ♂♂, though the latter show variation in this respect.

Soela Is., June, July, September 1918 (*W. J. C. Frost*); 6 ♂♂ (including the type) and 1 ♀ (allotype) in coll. Joicey. Also 2 ♂♂, 2 ♀♀ from Soela Mangoli, Oct.-Nov. 1897 (*W. Doherty*), in coll. Tring Museum.

Stoll's very unsatisfactory figure shows very *narrowly* yellow apices, and the transverse lines obliterated; I have not seen similar examples, though occasional aberrations from Celebes and other localities do show a tendency to become yellow apically, thus foreshadowing the peculiarity which becomes racial in the Soela Islands.

Subfamily *HEMITHEINÆ*.

9. *Pingasa floridivenis*, sp. n.

♀.—49 mm.

Head ochreous, with the upper part of the face black. Palpus with third joint slightly longer than second; greyish ochreous, the first and second joints broadly and the third joint proximally more narrowly white beneath. Thorax above bright ochreous, beneath whitish. Abdomen above whitish irrorated with olive-grey and ochreous, the latter

forming bright but slightly interrupted bands posteriorly on the segments; crests light greyish ochreous; sides of base blackish; underside white. Fore and middle legs largely blackened, the femur and part of tibia remaining white on outer sides; hind leg whiter, but irrorated or clouded with grey.

Fore wing broad; SC^2 wanting (sport?); white, irrorated with olive-grey and very sparsely with black, the proximal and distal areas also with bright ochreous, the veins in these areas broadly, in the median area very slenderly, bright ochreous; an ill-defined blackish band or shade close to base, not reaching costa; antemedian line thick, black, at little beyond one-fourth, very gently curved, at M and SM^2 very slightly dentate inwards; median area more olivaceous costally and with long, not very strong, olive-grey cell-mark; postmedian line black, from beyond two-thirds costa to about three-fifths hind margin, strongly dentate outwards on most of the veins, feebly so on SM^2 , nearest the termen at R^3 and the medians, retracted behind M^2 ; subterminal white line distinct between M^2 and hind margin, running obliquely towards tornus, very faint in the rest of its course; some ill-defined whitish dots to termen.

Hind wing with subbasal shade slight, antemedian line wanting, no ochreous proximal area; hairs of median area bright ochreous; postmedian line finer than on fore wing, otherwise similar; distal area nearly as on fore wing.

Underside dirty white, with rather broad black borders containing large white terminal spots, so that the black only runs to the termen between the radials, around M^2 (in both these places more narrowly on hind wing), and at tornus; base, especially at costa, bright yellow; fore wing with a rather large dark discal mark.

A'koon, Gold Coast, 17th Jan., 1919 (*C. Harrison*).

The first-known African species of the genus to approach in colour *P. venusta*, Warr. The blackish subbasal markings also distinctive.

10. *Gelasma* (?) *triplicifascia*, Prout, ♀.

My type ♂, described in Wytsman's 'Genera Insectorum,' fasc. 129, p. 149 (1912), from a single somewhat damaged ♂ in the British Museum, has hitherto remained unique. A ♀ from Tananarive, recently acquired by Mr. Joicey, is somewhat larger (33 mm.), rather broader-winged, the termen slightly more waved, that of the fore wing a little more convex (compare the sexual difference in *G. spumata*, Warr., and

other allies), otherwise quite similar to the ♂. Its fresher condition allows me to add, however, that the ground-colour is really white with green irroration and the bands grey-green, and that the abdomen has two small brown dorsal spots. The antenna is serrate and the palpus is short, thus aberrant for the genus.

11. *Gelasma versicauda*, sp. n.

♂.—43–47 mm.

Larger than *protrusa*, Butl. Face deeper black (less tinged with red). Palpus with third joint rather shorter, though not quite as short as in *illituratora*, Walk.

Fore wing darker, bluer green; terminal line and dots obsolete; proximal part of fringe less tinged with reddish—dark grey with vaguely darker spots opposite the veins.

Hind wing with tail longer than in *protrusa*, directed rather markedly outward—i. e., with the posterior half of the distal margin (from tornus to tip of tail) comparatively straight; concolorous with fore wing; terminal line fine and weak or almost obsolete; fringe nearly as on fore wing, the proximal dark part rather narrow, the pale distal (whitish ochreous) part ample.

Koshun, Formosa. Type and another in coll. Joicey; also in Coll. Tring Museum from the same locality.

Subfamily GEOMETRINÆ.

12. *Amnemopsyche charmione lufira*, subsp. n.

♂ ♀.—39–41 mm.

On an average smaller than *c. charmione*, Fab., from W. Africa.

Fore wing with the white markings in general reduced, much more shaded with orange, which broadly borders the discal band and almost entirely fills the subapical spot; discal band continued almost to hind margin, confluent proximally with the yellowish hind-marginal streak from base.

Hind wing with the black border continued narrowly along abdominal margin, invaded by a small orange projection from the ground-colour between fold and SM²; orange subterminal spot between R³ and M¹ generally small.

Congo Free State; Lufira River, affluents Kikura and Buluo Rivers, near Likasi Copper Mines, 4000 ft., 28th Feb.–15th April, 1919; 5 ♂ ♂, 1 ♀ (*T. A. Barns*).

Family Uraniidæ.

13. *Acropterus parvidentata moluccana*, subsp. n.

♂ ♀.—47–53 mm.

Distinguished from *D. parvidentata*, Warr. (Nov. Zool. iv. p. 199, Lombok and Celebes), as follows:—

Fore wing with the costal edge more weakly and minutely dotted, the dots in general wanting entirely from middle to near apex; particularly noticeable is the great reduction of the apical dots. The double lines from hind margin towards apex generally remaining well separated at the point at which they fade out near apex. Both wings with the markings on an average slightly greyer than in *p. parvidentata*, the terminal line in the typical (Obi) form obsolescent or strongly interrupted, but much better developed in that from the S. Moluccas, which might perhaps be again separated racially.

Obi, July–September, 1918 (*W. J. C. Frost*); 4 ♂♂ (including type) and 1 ♀ in coll. Joicey. Also from Amboina, Ceram, and Gisser Island (near Ceram), in coll. div.

XLI.—*Odonata collected in Mesopotamia by the late Major R. Brewitt-Taylor, R.A.M.C.* By KENNETH J. MORTON, F.E.S.

[Plate XIV.]

JUST after the completion of my notes on "Odonata from Mesopotamia" ('Entomologist's Monthly Magazine,' 3rd ser. vol. v. pp. 143–151, 183–196, 1919), Dr. Gahan kindly gave me the welcome opportunity of examining another large collection of these insects from the same region, brought together by the late Major R. Brewitt-Taylor, R.A.M.C., presented to the British Museum by Mrs. Brewitt-Taylor.

Major Brewitt-Taylor was apparently a novice as far as dragon-flies were concerned, but he had taken up the subject with a rare enthusiasm and with some originality, and his notes and descriptions made from the living insects gave promise of better things if he had been spared to continue the work. Preservation of the striking colours of the living insects had evidently been one of his chief aims, and in this he succeeded in quite a marked degree, to this end a large number of his captures having been carefully eviscerated. As a result of this treatment, for example in the case of